

REMARKS/ARGUMENTS

This Amendment is submitted in response to the Office Action dated July 18, 2007, and within the three month period for reply extending to October 18, 2007. The current status of the claims is summarized below.

5 Claims 1-4, 7-13, and 15-20 are currently amended.

 Claims 5-6, 14, and 21 are cancelled.

 Claims 1-4, 7-13, and 15-20 are pending following entry of this Amendment.

Specification

10 The Applicant has amended each of paragraphs [0015], [0019], [0025], and [0028] of the specification to correct the informalities identified by the Office. Therefore, the Office is requested to withdraw the objections to the specification.

Claim Objections

15 The Applicant submits that the amendments to claims 2-4, 7-13, and 15-20 obviate the Office's claim objections. Therefore, the Office is requested to withdraw the claim objections. The Office is requested to note that claims 5-6, 14, and 21 have been cancelled.

20 **Rejections under 35 U.S.C. 112**

 Claim 4 was rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains to make and/or use the invention. This rejection is traversed.

 The Office has asserted that the disclosure does not disclose the first state
25 machine continuing the deviated device communication when deviated. First, the Office

is requested to note that claim 4 has been amended to incorporate the features of claim 5, thereby removing recitation of "to an extent possible." Second, the Office is requested to note that support for operating the first state machine to continue the device communication is provided at A) page 9, lines 12-16, B) page 12, line 22, through page 5 13, line 1, and C) page 14, lines 8-11. For example, page 9, lines 12-16, of the specification state that "While operating in the PERFORM REQUEST state 207, the first state machine (SM1) is configured to continue the frame transfer operation up to an instance at which a response is required to be provided by the first state machine (SM1), whereby the frame transfer operation will be held at the instance where the first state 10 machine (SM1) is required to provide a response."

The Applicant submits that amended claim 4 does in fact comply with the enablement requirement of 35 U.S.C. 112, first paragraph. Therefore, the Office is requested to withdraw the rejection of amended claim 4 under 35 U.S.C. 112.

15 Claims 1-21 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. These rejections are traversed.

The Applicant submits that the amendments to claims 1-4, 7-13, and 15-20 obviate the Office's rejections under 35 U.S.C. 112, second paragraph. Therefore, the 20 Office is requested to withdraw the rejections of claims 1-4, 7-13, and 15-20 under 35 U.S.C. 112, second paragraph. The Office is requested to note that claims 5-6, 14, and 21 have been cancelled.

Rejections under 35 U.S.C. 101

Claims 15-21 were rejected as being directed to non-statutory subject matter.

These rejections are traversed.

Each of claims 15-20 has been amended to recite "computer readable storage
5 medium." The Applicant submits that each of claims 15-20 is directed to statutory subject
matter per 35 U.S.C. 101. Therefore, the Office is requested to withdraw the rejections of
claims 15-20 under 35 U.S.C. 101. The Office is requested to note that claim 21 has been
cancelled.

10 **Rejections under 35 U.S.C. 102**

Claims 1-6, 8-9, 11-16, and 18-21 were rejected under 35 U.S.C. 102(b) as being
anticipated by Diepstraten et al. ("Diepstraten" hereafter) (U.S. Patent No. 6,243,736).
These rejections are traversed.

The Office has asserted that the foreground row 10 in the matrix of Figure 1 of
15 Diepstraten teaches the first state machine as recited in claim 1. The Office has also
asserted that the background row 12 in the matrix of Figure 1 of Diepstraten teaches the
second state machine as recited in claim 1. As discussed below, the Applicant submits
that these assertions by the Office are incorrect.

Claim 1 recites that the first state machine is defined by circuitry configured to
20 perform device communication. Claim 1, as amended, clarifies that the device
communication is a transfer of data in accordance with a standard protocol from one
device to another device. In rejecting claim 1, the Office has asserted that Diepstraten
(column 2, line 65, through column 3, line 3) teaches that the foreground row 10 in the
matrix of Figure 1 (which is asserted by the Office to teach the first state machine of
25 claim 1) is defined by circuitry configured to perform device communication. However,

the Applicant submits that the disclosure of Diepstraten at column 2, line 65, through column 3, line 3, is not disclosed by Diepstraten as a characterization of the foreground row 10 in the matrix of Figure 1, and in fact has absolutely nothing to do with the foreground row 10 in the matrix of Figure 1.

5 More specifically, the Diepstraten (column 2, line 60, through column 3, line 3) states that allowing events to initiate handling routines at their last execution address was a major benefit for controlling I/O devices, data communication and network protocols, and other processes defined in terms of communicating state machines. Diepstraten (column 2, line 60, through column 3, line 3) mentions nothing with regard to definition
10 of the foreground row 10 to perform device communication. Additionally, Diepstraten (column 2, line 60, through column 3, line 3) is provided as a characterization of the background of the invention, whereas the foreground row 10 in the matrix of Figure 1 of Diepstraten is provided as the detailed description of the invention.

 The Office is reminded that the standard for lack of novelty (i.e., "anticipation")
15 under 35 U.S.C. 102 is one of strict identity. "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). As discussed above, the disclosure of Diepstraten (column 2, line 60, through column 3, line 3) mentions nothing with regard to definition of the foreground row 10 to perform device communication.
20 Furthermore, the Applicant submits that no other disclosure within Diepstraten characterizes the foreground row 10 in the matrix of Figure 1 as a state machine defined by circuitry configured to perform device communication, wherein the device communication is a transfer of data in accordance with a standard protocol from one device to another device. Therefore, the Applicant submits that Diepstraten fails to teach
25 the first state machine defined by circuitry configured to perform device communication,

wherein the device communication is a transfer of data in accordance with a standard protocol from one device to another device, as recited in amended claim 1.

Claim 1 has been further amended to recite that the second state machine is defined by circuitry configured to perform the same device communication to be performed by the first state machine simultaneously with performance of the device communication by the first state machine, whereby a condition of the device communication performed by the second state machine represents a condition of the device communication performed by the first state machine. Thus, amended claim 1 recites that the first and second state machine are configured to perform the same device communication simultaneously.

Diepstraten (column 6, lines 54-56) explicitly teaches that during each instruction cycle, ONLY ONE context may be "running," i.e., executing an instruction on the processor, or the processor alternatively may be idle. Diepstraten (column 6, lines 56-58) further teaches that if the foreground running state Rf 18 is occupied by a context, this context is the SOLE running context within both the foreground 10 and the background 12. Diepstraten (column 6, lines 58-60) further teaches that if the foreground running state Rf 18 is not occupied, a context within the background running state Rb 24 is the SOLE running context within both the foreground 10 and the background 12. Therefore, Diepstraten explicitly teaches that ONLY ONE context can be running at a given time, considering all the contexts that exists in the collective states of both foreground 10 and the background 12. Thus, Diepstraten (column 6, lines 54-60) teaches that only one of the foreground 10 and the background 12 can be running at a given time.

Considering with prejudice the Office's assertion that the Diepstraten's foreground 10 teaches the first state machine of amended claim 1, and that Diepstraten's background 12 teaches the second state machine of amended claim 1, the Applicant submits that the

5 teachings of Diepstraten (column 6, lines 54-60) preclude a simultaneous operation of the first and second state machines. Therefore, the Applicant submits that Diepstraten does not teach the second state machine of amended claim 1, wherein the second state machine is defined by circuitry configured to perform the same device communication to be performed by the first state machine simultaneously with performance of the device communication by the first state machine, and whereby a condition of the device communication performed by the second state machine represents a condition of the device communication performed by the first state machine.

10 "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). As discussed above, Diepstraten fails to teach each and every feature of amended claim 1. Therefore, the Applicant submits that amended claim 1 is not anticipated by Diepstraten under 35 U.S.C. 102. Therefore, the Office is requested to withdraw the rejection of claim 1 under 35 U.S.C. 102.

20 Claim 8 has been amended to recite that the second state machine is operated to perform a frame transfer operation identical to the frame transfer operation being performed by the first state machine, simultaneously with performance of the frame transfer operation by the first state machine. Amended claim 8 also recites that a condition of the frame transfer operation performed by the second state machine represents a condition of the frame transfer operation performed by the first state machine. Amended claim 8 further recites that the current state of the frame transfer operation is indicated by the condition of the frame transfer operation performed by the second state machine.

The Applicant submits that to the extent that amended claim 8 recites features similar to those recited in amended claim 1, the arguments presented above against the rejection of claim 1 as being anticipated by Diepstraten under 35 U.S.C. 102 are equally applicable to amended claim 8. Thus, the Applicant submits that Diepstraten fails to teach
5 each and every feature of amended claim 8. Therefore, the Applicant submits that amended claim 8 is not anticipated by Diepstraten under 35 U.S.C. 102. Therefore, the Office is requested to withdraw the rejection of amended claim 8 under 35 U.S.C. 102.

Claim 15 has been amended in the same manner as claim 8. Therefore, as with claim 8, the arguments presented above against the rejection of claim 1 as being
10 anticipated by Diepstraten under 35 U.S.C. 102 are equally applicable to amended claim 15. Thus, the Applicant submits that Diepstraten fails to teach each and every feature of amended claim 15. Therefore, the Applicant submits that amended claim 15 is not anticipated by Diepstraten under 35 U.S.C. 102. Therefore, the Office is requested to withdraw the rejection of amended claim 15 under 35 U.S.C. 102.

15 Because a dependent claim incorporates each and every feature of its independent claim, the dependent claim is patentable for at least the same reasons provided for its independent claim. Therefore, the Applicant submits that each of dependent claims 2-4, 9, 11-13, 16, and 18-20 is patentable for at least the same reasons as its independent claim. The Office is requested to withdraw the rejections of dependent claims 2-4, 9, 11-13, 16,
20 and 18-20 under 35 U.S.C. 102. The Office is requested to note that claims 5-6, 14, and 21 are cancelled.

